

The decision of moving therapy from HD imatinib to nilotinib in CML patients with resistance to standard dose imatinib is a reasonable option.

THE COST OF CHEMOTHERAPY SIDE EFFECTS

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OBJECTIVES: While many new cancer treatments are expensive, their improved side effect profile may reduce overall costs to the health-care system compared to traditional chemotherapy. The objective of this work was to identify a benchmark approach to the estimation of costs for chemotherapy side effects, which could then be incorporated into estimates of overall chemotherapy costs. **METHODS:** A systematic review of clinical and economic literature was undertaken using multiple databases and search terms for chemotherapy, adverse events, and cost. Eligible articles were reviewed for methods, quality and cost outcomes. Results were combined using descriptive techniques to identify best practice methodologies for estimating resource use and costs associated with managing chemotherapy side effects. **RESULTS:** From 4985 titles, 59 eligible articles were identified. Studies were divided into model based analysis ($n = 33$) and empirical studies ($n = 26$). The perspectives, approaches, and methods for estimating quantities and value of resources consumed were highly variable. These disparate methods contributed to highly divergent estimates of cost when specific side effects were examined (eg \$446 to \$17,889 for neutropenia, 2009 AUD). A clear benchmark approach to the economic analysis of chemotherapy side effects was not available. Thus, general methodological recommendations were made to guide development of reliable, valid and transparent estimates of the costs of chemotherapy side effects, based on best practice modeling techniques. The recommendations address issues such as the use of 1) the health-care system perspective; 2) clinical guidelines and patterns of care studies to identify resources; 3) modeling and empirical methods to obtain accurate costing information; and 4) appropriate modeling to allow incorporation into broader economic evaluations. **CONCLUSIONS:** These recommendations provide a framework for developing cost estimates for specific adverse events. The EMCaP Project will utilize this framework to incorporate estimates of adverse event costs into broader economic evaluations of alternative chemotherapy protocols.

PCN27

CANCER – Patient-Reported Outcomes Studies

TRANSLATION AND VALIDATION OF EORTC QLQ-C30 INTO INDONESIAN VERSION FOR CANCER PATIENTS IN INDONESIA

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OBJECTIVES: To validate the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire—C30 (EORTC QLQ-C30) in an Indonesian version. The standard procedure of forward-backward translation was adhered to in the translation procedures, pilot testing, review, and reliability and construct validity evaluation. **METHODS:** Data were collected from cancer patients in the Oncology Department of Dr. Sardjito Hospital, Yogyakarta, Indonesia, who were treated with a cisplatin at the dosage ≥ 50 mg/m² as monotherapy or in combinations. We used the Short Form-36 (SF-36) to assess the construct validity of our translated questionnaire. **RESULTS:** About 85% patients ($n = 17$) were able to fill out the questionnaires by themselves and there were no missing responses to the questions in the pilot study. One hundred twenty-eight patients with different cancer diagnoses were recruited in the validation process from March 2009 to November 2009. The internal consistency was above 0.70 for the SF-36 scales physical function, social function, pain, physical role, and emotional role; values >0.70 were observed in the Indonesian version of EORTC QLQ-C30 scales. Floor and ceiling effects were seen more evidently in the physical, social dimensions, pain and fatigue than in single items. Both of the questionnaires showed that different diagnoses were associated with a similar impact of quality of life in sensitivity tests. Correlations between Indonesian version of EORTC QLQ-C30 and SF-36 dimensions were moderate: between 0.18 and 0.48 for the five domains. The discriminant validity between the two questionnaires was acceptable (between 0.02–0.47). **CONCLUSIONS:** The Indonesian version of the EORTC QLQ C-30 can be used as a questionnaire to assess quality of life in Indonesian cancer patients.

PCN28

ESTIMATING WOMEN'S PREFERENCES FOR CERVICAL CANCER SCREENING PROGRAMS USING CONJOINT ANALYSIS

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OBJECTIVES: Compared with the 3- to 5-year coverage rates of 75% in many European countries, the 3-year coverage rate of 51.5% for Pap smear screening in Taiwan has not achieved a satisfactory level. Previous studies have showed that patients' preferences were important information for improving the participation rate of cancer screening. This study aimed to understand women's preferences for cervical

cancer (CC) screening tests with various features. **METHODS:** Face-to-face patient interviews were carried out with 212 women aged 30–55 at the gynecological outpatient clinics in a regional hospital in Taipei, Taiwan, during January and April 2009. The participants were asked to rate 12 pairs of hypothetical test scenarios comprised of different combinations of six attributes including accuracy of the test, price, screening administrators, place of screening and frequency of screening. The relative importance of test attributes was calculated and a cluster analysis was done to identify subgroup with differential preferences. **RESULTS:** Accuracy, price, and place of screening ($P < 0.001$) were found to be the most important attributes in determining women's preferences. Cluster analysis revealed no significant differences in subgroup of women with different health-promoting lifestyles. **CONCLUSIONS:** The most preferred screening programs was "not screening at home," "high accuracy of test," and "low price" among women residing in a metropolitan city like Taipei. Future direction of study on preferences for CC screening should be targeted at women with low utilization of Paps smear screening to better inform the decision-makers in designing more effective CC prevention program.

PCN31

USING DISCRETE CHOICE EXPERIMENTS TO ESTIMATE THE MARGINAL WILLINGNESS TO PAY OF INSURANCE PREMIUM FOR LUNG CANCER TREATMENT IN KOREA

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OBJECTIVES: This study, using DCE method, figures out the characteristics of the decision-making for lung cancer treatment and investigates the attributes affecting the respondents' choice. Also it ascertains marginal willingness to pay and relative preferences for lung cancer treatment among the general population of 600 respondents in Korea. **METHODS:** In the survey, the respondents are asked to choose more than one discrete choice option, resulting in multiple observations for each individual. For each pair-wise comparison of choice set, the respondent will make a choice among three alternatives; A, B, or opt out. Thus, the nested-logit model using full maximum likelihood allows us to empirically estimate multi-levels of dependent variables. For the robustness check of our empirical results, we try considering the nature of distribution of error terms in the utility function in several ways. The survey questionnaire includes four attributes associated with lung cancer in Korea (incidence rates, survival rates, treatment costs, and monthly insurance premium), socio-economic status, antecedent variables, and questions regarding risk averseness and subjective health evaluation. **RESULTS:** The estimates of MWTP between survival rate and monthly insurance premium and MTWP between total treatment costs for lung cancer and monthly insurance premium, by employing "Hybrid Conditional Fixed Effects Logit Model" to figure out the existence of heterogeneity of any observed and unobserved components, are reflecting ranges of 261 KRW–286 KRW and 3414 KRW–4538 KRW, respectively. **CONCLUSIONS:** Compared to female counterparts, male respondents have higher MWTP of monthly insurance premium for two related attributes. Besides, married and younger respondents, with higher income and education have more MWTP compared to their respective counterparts. One interesting point is that dependents' MWTP of survival rate is higher than that of insurance premium payers although MTWP of total treatment costs for dependents is significantly lower than premium payers' MWTP.

PCN32

USING DISCRETE CHOICE EXPERIMENTS TO ESTIMATE THE MARGINAL WILLINGNESS TO PAY OF INSURANCE PREMIUM FOR STOMACH CANCER TREATMENT IN KOREA

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OBJECTIVES: This study, using DCE method, figures out the characteristics of the decision-making for stomach cancer treatment and investigates the attributes affecting the respondents' choice. Also it ascertains marginal willingness to pay and relative preferences for stomach cancer treatment among the general population of 600 respondents in Korea. **METHODS:** In the survey, the respondents are asked to choose more than one discrete choice option, resulting in multiple observations for each individual. For each pair-wise comparison of choice set, the respondent will make a choice among three alternatives; A, B, or opt out. Thus, the nested-logit model using full maximum likelihood allows us to empirically estimate multi-levels of dependent variables. For the robustness check of our empirical results, we try considering the nature of distribution of error terms in the utility function in several ways. The survey questionnaire includes four attributes associated with stomach cancer in Korea (incidence rates, survival rates in 5 years after treatment, total treatment costs, and monthly insurance premium), socio-economic status, antecedent variables, along with questions regarding risk averseness and subjective health evaluation. **RESULTS:** The estimates of MWTP between survival rate and monthly insurance premium and MTWP between total treatment costs and monthly insurance premium, by employing "Hybrid Conditional Fixed Effects Logit Model" to figure out the existence of heterogeneity of any observed and unobserved components, are reflecting reasonable range of 176 KRW–194 KRW and 5408 KRW–6945 KRW, respectively. **CONCLUSIONS:** Compared to female counterparts, male respondents have higher MWTP of monthly insurance premium for two related attributes. Besides, currently married respondents, with higher income, and higher educational attainments have more MWTP compared to their respective counterparts. One interesting point is that dependents' MWTP is higher than that of insurance premium payers even after controlling for any other variables.

PCN30